

Remarks

Applicant and the agents of record wish to thank Examiner Naff for according them a telephone interview on February 9, 2005. After some brief introductions of the agents of the Applicant (Brenda Jarrell, Charles Lyon, and the undersigned, Stacy Blasberg), the parties discussed some of the issues set forth in the Final Office Action dated October 14, 2004. Applicant now responds to the Final Office Action and in its Response, hopes to implement its understandings from the telephone interview in order to overcome the outstanding rejections and move the application towards issuance.

Amendments

Applicant has amended claim 1 in order to clarify the distinction between the stamp and the stamping surface. Furthermore, Applicant has amended claim 1 to include a Markush group of non-planar stamp shapes as suggested by Examiner and as supported in various sections throughout the specification including page 12, lines 15-17 ("It will be appreciated that the invention is not limited to a cylinder or a sphere or even a rounded stamp; rather the stamp may take on any cross-section, such as an ellipse or a square."), page 12, lines 20-24 ("For example, the cross section may take the shape of a many-sided polygon having a variety of different side lengths and included angles. In another embodiment, the stamp may be spherical in shape or may take the shape of a spheroid having a variety of diameter lengths."), page 12, lines 24-27 ("It is not necessary for the stamp to be a portion of a regular solid or have only flat or curved faces; it may take the shape of a three dimensional surface having some flat faces and some curved faces."). Claims 33, 38, 124-125 have also been amended, and such amendments are fully supported by the originally-filed specification.

Indefiniteness and Written Description

During the telephone interview with Examiner, the rejection of claims 1-38 and 116-132 as failing to meet the written description and enablement requirements of 35 U.S.C. § 112 were discussed. Applicant noted that the term "non-planar" stamp was described and depicted throughout the specification, pointing as way of example to page 12, lines 12-28 and page 13, lines 1-2, wherein the specification defines different shapes of stamps by their cross-section. Although Applicant respectfully submitted that one of ordinary skill in the art would understand the demarcation between planar and non-planar stamps, Examiner maintained his position and

suggested that Applicant consider replacing the term “non-planar” with language that points out stamp shapes. Examiner indicated that such language would help to clarify the meaning and scope of the invention and hence likely to meet the requirements of 35 U.S.C. § 112, second paragraph. Furthermore, Examiner also indicated that since such language comes directly from the specification, it would also likely meet the requirements of 35 U.S.C. § 112, first paragraph. In order to further prosecution of this case towards allowance, Applicant has therefore amended claims 1 and 116, to which claims 2-38 and 117-132 depend respectively, to include the language “wherein before the step of modulating, the stamp has a shape selected from the group consisting of cylindrical, spherical, elliptical, spheroidal, polygonal, balloon-like, and combinations thereof, and wherein said shape does not result from a surface texture or pattern.”

Examiner has stated that claims 33-36, 116-122 and 126-132 are indefinite and unclear with respect to how the stamp, substrate and their respective lumens related to one another. Claims 33, 124 and 125 have been amended to further clarify the relationship between the stamp, substrate and lumen(s). The claims describe several different scenarios of stamping: 1) claims 123-125 describe wherein the stamp is placed inside the substrate having a lumen, and the stamp (via inflation/deflation of the lumen of the stamp) is modulated to press out into the lumen of the substrate; 2) claims 33-36 and 120-122 describe wherein the substrate is placed inside the stamp having a lumen, and the stamp is modulated to press down upon the substrate; and 3) claims 33-36 and 120-122 describe wherein the substrate is placed inside the stamp having a lumen and the substrate is modulated to press out into the stamp. Furthermore, Figure 1 depicts and page 11, lines 5-13 describe, wherein a substrate is disposed within the stamp and the deformation of the stamp places raised portions of the stamp in contact with the substrate. As described on page 17, lines 23-26 and depicted in Figure 5, the substrate may be passed around the outside of the stamp and patterned on its interior. In this embodiment, the stamp is passed inside the lumen of the substrate. Applicant therefore respectfully submits that claims 33-36 and 116-132 and the corresponding portions of the specification reasonably provides enablement for the above-described relationships between a stamp lumen and a substrate lumen.

Examiner maintains that claims 34 and 118 are confusing by requiring walls of the stamp defining a lumen to be flat. However, an applicant may be his or her own lexicographer as long as the meaning assigned to the term is not repugnant to the term’s well-known usage. *See* MPEP §§ 2111.01, 2173.01. Applicant has described and depicted the term “lumen” to encompass both circular and non-circular shapes. For example, the stamp and its lumen may take on a cross-

section of a square (see, e.g., page 12, lines 15-17). Because this definition is not repugnant to the term's well-known usage and because those of ordinary skill in the art would understand a lumen having flat walls, Applicant respectfully submits that neither claim 34 nor claim 118 are confusing.

With respect to claims 35 and 119, Examiner has correctly identified that the relationship of the tubular structure of the stamp to the lumen of the stamp of claims 33 and 116, is that the stamp is in the form of a tube having a lumen. Applicant respectfully submits that these claims are clear.

Examiner states that in claim 38, it is uncertain as to the substrate structure that is open, partially closed, or closed and "being open, partially closed or closed will be relative and subjective when there is no structure defined that is capable of being open, partially closed, or closed. Applicant has amended claim 38 to state "a substrate having a three-dimensional surface" to clarify that the substrate may have an open surface without a lumen (see page 13, lines 4-7, "For example, the substrate may define a portion of a sphere or spheroid or include a saddle point."), or have a closed or partially closed surface such as a balloon (see page 13, lines 7-9, and Figure 10).

Claim 131 has been cancelled.

Examiner has stated that the term "balloon-like" in claim 132 is "uncertain." Applicant respectfully submits that one of ordinary skill in the art would understand this phrase to generally mean "like a balloon", and specifically, similar to a balloon in shape, wherein there exists one opening with a hollow and bulbous portion that may inflate and deflate (see page 12, line 15). Applicant reiterates that he may define the invention in "essentially ... whatever terms [he] choose[s] so long as the terms are not used in ways that are contrary to accepted meanings in the art. Applicant may use functional language, alternative expressions, negative limitations, or any style of expression or format of claim which makes clear the boundaries of the subject matter for which protection is sought." MPEP § 2173.01. Applicant therefore respectfully submits that claim 132 is certain as to its meaning and scope.

Enablement

Claims 33-36 and 116-132 have been rejected under 35 U.S.C. § 112, first paragraph for lack of enablement. Claims 33, 124 and 125 have been amended to further clarify the relationship between the stamp, substrate and lumen(s). The claims describe several different

scenarios of stamping: 1) claims 123-125 describe wherein the stamp is placed inside the substrate having a lumen, and the stamp (via inflation/deflation of the lumen of the stamp) is modulated to press out into the lumen of the substrate; 2) claims 33-36 and 120-122 describe wherein the substrate is placed inside the stamp having a lumen, and the stamp is modulated to press down upon the substrate; and 3) claims 33-36 and 120-122 describe wherein the substrate is placed inside the stamp having a lumen and the substrate is modulated to press out into the stamp. Furthermore, Figure 1 depicts and page 11, lines 5-13 describe wherein a substrate is disposed within the stamp and the deformation of the stamp places raised portions of the stamp in contact with the substrate. As described on page 17, lines 23-26 and depicted in Figure 5, the substrate may be passed around the outside of the stamp and patterned on its interior. In this embodiment, the stamp is passed inside the lumen of the substrate. Applicant therefore respectfully submits that claims 33-36 and 116-132 and the corresponding portions of the specification reasonably provides enablement for the above-described relationships between a stamp lumen and a substrate lumen.

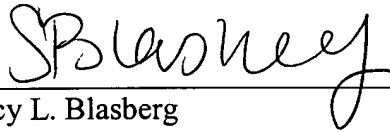
Prior Art

Each of the prior art rejections relies on Maracas et al (5,669,303) for the rejection. As discussed in the interview, Maracas discloses a planar, rectangular stamp at rest that then is deformed. Examiner further states that Maracas shows a non-planar stamp since it contains a surface with raised and recessed portions. In contrast, the invention of the present application discloses a method of patterning a surface wherein before the step of modulating, the stamp has a shape selected from the group consisting of cylindrical, spherical, elliptical, spheroidal, polygonal, balloon-like, and combinations thereof, and wherein said shape does not result from a surface texture or pattern.

With respect to claims 1-38, 116-119 and 126-132, Applicant respectfully submits that the deficiencies of Maracas are not remedied by the secondary references of Whitesides et al. (6,180,239 B1), Singhvi et al. (5,776,748), Kumar et al. (5,512,131), and Anderson et al. (6,645,432 B1). Indeed, the combined references do not disclose, teach or suggest a method of patterning a surface wherein before the step of modulating, the stamp has a shape selected from the group consisting of cylindrical, spherical, elliptical, spheroidal, polygonal, balloon-like, and combinations thereof, and wherein said shape does not result from a surface texture or pattern.

Based on the arguments presented above, it is submitted that the pending claims, including the newly added dependent claims, are allowable over the art of record. Applicant would like to thank Examiner for granting a telephone interview and for his thoughtful comments and careful consideration of the case and requests favorable action. Please charge any fees as may be required, or credit any overpayments, to our Deposit Account No. 03-1721.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "S Blasberg", written over a horizontal line.

Stacy L. Blasberg
Registration No. 52,625

PATENT GROUP
CHOATE, HALL & STEWART
Exchange Place
53 State Street
Boston, MA 02109
(617) 248-5000

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